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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/526,707      | 03/03/2005  | Oliver Amborny       | 28944/41036         | 7433             |

4743 7590 01/25/2006

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| EXAMINER |
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LOFTIN, CELESTE

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2686

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/526,707 | <b>Applicant(s)</b><br>AMBERNY ET AL. |  |
|                              | <b>Examiner</b><br>Celeste L. Loftin | <b>Art Unit</b><br>2686               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 1 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

1. Claim 1 objected to because of the following informalities: It is not clear as to what the applicant is referring to when using the phrase "on the one hand" and "and on the other hand". Appropriate correction is required.
2. Claim 13 is objected to because of the following informalities: claim 13 is not the dependent of any previous claim. However, claim 13 was evaluated as if it were dependent upon claim 7. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagaw, U.S. Patent 5,533,101, in view of De Ruijter et al. (Ruijter), U.S. Publication 10,502,521.

Regarding claim 1, Ruijter discloses a central base for a private wireless local area network, this central base (element 12 in Figure. 1) comprising electronic circuits that include an electronic central unit (element 51 in Figure 2) and that are supplied with electricity by at least one live supply line intended to be connected to an external

electricity power sources (a terminating set is connected by way of a power cord plug

13) **(col. 3 lines 30-40)** and central base being suitable for communication:

- on the other hand, with a public telecommunication network (the terminating set is connected to a telephone line) **(col. 3 lines 40-45)**,
- and on the other hand, with at least one wireless peripheral device according to a digital bidirectional wireless protocol for a private wireless local area network (the termination set is connected to a telephone line and includes an antenna for radio communication) **(col. 3 lines 40-45)**,

characterized in that it comprises an interference circuit

which controlled by the electronic central unit of said central base and which is connected to said supply line, this interface circuit being suitable for sending and receiving messages on said supply line (the termination set is connected to a telephone line and includes an antenna for radio communication and an internal circuit such as a radio communication circuit) **(col. 3 lines 40-50)**,

and in that interface circuit of the central base is suitable for sending and receiving high frequency periodic signals representative of sent and received messages, and the central base comprises a filter suitable for filtering said high frequency periodic signals between the interface circuit of the central base and at least a portion of the electronic circuits of the central base (the radio communication circuit comprises a transmitting and receiving circuit, both circuits comprises a band

pass filter, such wire communication circuit is capable of communication by use of high frequency signals) (**col.4 lines 33-43 and 49-56**).

Miyagawa fails to disclose the filter being used as a low-pass filter.

In a similar field of endeavor, Ruijter discloses the filter being used as a low-pass filter (the output of the notch filter is high frequency noise, this output is input for the low pass filter) (**pg. 2, paragraphs [0015]**).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Miyagawa to include the filter being used as a low-pass filter.

Motivation for this modification would have been to enhance the use of a cordless telephone so that there is good noise suppression and a short settling time.

Regarding claim 2, the combination of Miyagawa and Rijuter disclose the central base as claimed in claim1. Miyagawa further discloses the interface circuit of the central base is installed in drop and insert mode on said supply line (from the figure the transceiver is considered located in parallel with the other transceiver 72, the power sources supplies power to the transceiver 71 (inserted on the supply line)) (**fig. 2, elements 71, 72, and 13**).

Regarding claim 3, the combination of Miyagawa and Rijuter disclose the central base as claimed in claim 1. Ruijter further discloses in which he interface circuit of the central base is suitable for sending and receiving periodic signals at a frequency lying between 100 and 500 kHz (during reception of the data 3db cut-off frequency of the low-pass filter is set to 100 Hz) (**pg. 1, paragraph [0005]**).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the combination of Miyagawa and Rijuter to include in which the interface circuit of the central base is suitable for sending and receiving periodic signals at a frequency lying between 100 and 500 kHz. Motivation for this modification would have been to enhance the use of a cordless telephone so that there is good noise suppression and a short settling time.

Regarding claim 4, the combination of Miyagawa and Rijuter disclose the central base station as claimed in claim 1. Miyagawa further discloses the interface circuit of the central base is controlled by the electronic central unit of the central base via a serial interface controller (according to figure 2 the transceiver 71 is connected in series with the controller) (**see figure 2**).

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa, **U.S. Patent 5,533,101**, in view of De Ruijter et al. (Ruijter), **U.S. Publication 10,502,521**, in further view of Silen et al. (Silen), **U.S. Publication 9,974,526**.

Regarding claim 5, the combination of Miyagawa and Rijuter discloses the central base as claimed in claim 1. The combination fails to disclose the base station being suitable for sending outgoing alphanumeric messages at least to the public telecommunication network for receiving incoming alphanumeric messages at least from said public telecommunication network, the electronic central unit of the central base being suitable for:

(a) recognizing at least certain incoming alphanumeric message intended for an external interface module, called service message, and for causing to be generated

on the supply line, by said interface circuit of the central base, a message corresponding to each incoming service message.

(b) and when it receives a message received by the interface circuit of the central base on the supply line, determining whether this message must be transmitted to the outside and in this case, sending an outgoing alphanumeric message, called outgoing service message, corresponding to the message received.

In a similar field of endeavor, Silen discloses the base station (network 1, which includes a compiler and a programming interface) (**pg. 2, paragraph [0030]**) being suitable for sending outgoing alphanumeric messages at least to the public telecommunication network for receiving incoming alphanumeric messages at least from said public telecommunication network (the compiler may be programmed to provide several options in response to a control request and when the compiler receives the correct menu item the control code is embedded in an email or SMS message and transmitted to the external device) (**pg. 3, paragraph [0038]**), the electronic central unit of the central base being suitable for:

(a) recognizing at least certain incoming alphanumeric message intended for an external interface module, called service message, and for causing to be generated on the supply line, by said interface circuit of the central base, a message corresponding to each incoming service message (the interface recognizes the request as a control request and transfers the request to the compiler, which may be programmed to provide several options in response to a control request (incoming message) and when the compiler receives the correct menu item the control code is

embedded in an email or SMS message and transmitted to the external device) (**pg. 3, paragraph [0038]**),

(b) and when it receives a message received by the interface circuit of the central base on the supply line, determining whether this message must be transmitted to the outside and in this case, sending an outgoing alphanumeric message, called outgoing service message, corresponding to the message received (the interface recognizes the request as a control request and transfers the request to the compiler, which may be programmed to provide several options in response to a control request (incoming message) and when the compiler receives the correct menu item the control code is embedded in an email or SMS message and transmitted to the external device) (**pg. 3, paragraph [0038]**).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify the combination of Miyagawa and Rijuter to include the base station being suitable for sending outgoing alphanumeric messages at least to the public telecommunication network for receiving incoming alphanumeric messages at least from said public telecommunication network, the electronic central unit of the central base being suitable for: (a) recognizing at least certain incoming alphanumeric message intended for an external interface module, called service message, and for causing to be generated on the supply line, by said interface circuit of the central base, a message corresponding to each incoming service message, (b) and when it receives a message received by the interface circuit of the central base on the supply line, determining whether this message must be transmitted to the outside and in this case, sending an



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outgoing alphanumeric message, called outgoing service message, corresponding to the message received. Motivation for this modification would have been to enhance the use of the terminating set, by allowing the DTMF receiver and generator to be used in combination with a network compiler.

Regarding claim 6, the combination of Miyagawa, Silien and Rijuter discloses the central base as claimed in claim 5. Silen further discloses a central base also suitable for sending outgoing alphanumeric messages to at least one wireless peripheral device, by using said wireless protocol, and for receiving incoming alphanumeric messages from said wireless peripheral devices (the pc is connected to network 1 and to the compiler via the internet 9 and WAP may be used, (the interface recognizes the request as a control request and transfers the request to the compiler, which may be programmed to provide several options in response to a control request (incoming message) and when the compiler receives the correct menu item the control code is embedded in an email or SMS message and transmitted to the external device) (**see Silen, pg. 3, paragraph [0038] and pg. 2, paragraph [0034]**).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify the combination of Miyagawa, Silien and Rijuter to include a central base also suitable for sending outgoing alphanumeric messages to at least one wireless peripheral device, by using said wireless protocol, and for receiving incoming alphanumeric messages from said wireless peripheral devices. Motivation for this modification would have been to enhance the use of the terminating set, by allowing the DTMF receiver and generator to be used in combination with a network compiler.

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6. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagaw, **U.S. Patent 5,533,101**, in view of De Ruijter et al. (Ruijter), **U.S. Publication 10,502,521**, in further view of Jarrett, **U.S. Patent 6,950,674**.

Regarding claim 7, the combination of Miyagawa and Rijuter discloses the central base as claimed in claim 1. The combination fails to disclose an external interface module distinct form the central base, which itself comprises:

- an electronic central unit,
- and an interface circuit controlled by said electronic central unit of the external interface mode and which is connected to said supply line, this interface circuit of the external interface module being suitable communication with the interface circuit of the central base by sending and receiving messages on said supply line.

In a similar field of endeavor, Jarrett discloses an external interface module distinct form the central base (the cordless phone is able to communicate via a fixed telephone network when the mobile transponder unit is physically connected to the base station) (**col. 10 lines 13-20**), which itself comprises:

- an electronic central unit (auto call diversion, automatically diverts incoming calls) (**col. 7 lines 16-25 and 30-35**),
- and an interface circuit (PSTN interface) controlled by said electronic central unit of the external interface mode and which is connected to said supply line, this interface circuit of the external interface module being suitable communication with the interface circuit of the central base by sending and receiving messages on said supply line (in this way the described multipurpose cordless phone

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system provides a facility for single personal contact through the cellular network number of the mobile transponder unit or the fixed network, the auto call diversion decides this based on its detection of the transponder unit) (**col. 7 lines 30-40**).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify the combination of Miyagawa and Rijuter to include an external interface module distinct from the central base, which itself comprises: an electronic central unit, and an interface circuit controlled by said electronic central unit of the external interface mode and which is connected to said supply line, this interface circuit of the external interface module being suitable communication with the interface circuit of the central base by sending and receiving messages on said supply line. Motivation for this modification would have been to provide multipurpose mobile cordless system at a comparable low cost.

Regarding claim 8, the combination of Miyagawa, Jarrett and Rijuter discloses the wireless device as claimed in claim 7. Miyagawa further discloses in which interface circuit of the external interface module is installed in a drop and insert mode on the (from the figure the transceiver is considered located in parallel with the other transceiver 72, the power sources supplies power to the transceiver 71 (inserted on the supply line)) (**see Miyagawa, fig. 2, elements 71, 72, and 13**).

Regarding claim 9, the combination of Miyagawa, Jarrett and Rijuter discloses the wireless device as claimed in claim 7. Miyagawa discloses the interface circuit of the external interface module is suitable for sending and receiving high frequency periodic signals representative of messages sent and received (the termination set is

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connected to a telephone line and includes an antenna for radio communication and an internal circuit such as a radio communication circuit) (**see Miyagawa, col. 3 lines 40-50**), and the external interface module comprises a filter suitable for filtering said high frequency periodic signals between the interface circuit of the external interface module and the electricity supply device intended to connect said supply line to the external power source (the radio communication circuit comprises a transmitting and receiving circuit, both circuits comprises a band pass filter, such wire communication circuit is capable of communication by use of high frequency signals) (**see Miyagawa, col.4 lines 33-43 and 49-56**).

Miyagawa fails to disclose the filter being used as a low-pass filter.

Ruijter discloses the filter being used as a low-pass filter (the output of the notch filter is high frequency noise, this output is input for the low pass filter) (**see Ruijter, pg. 2, paragraphs [0015]**).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the combination of Miyagawa, Jarrett and Rujuter to include the filter being used as a low-pass filter. Motivation for this modification would have been to enhance the use of a cordless telephone so that there is good noise suppression and a short settling time.

Regarding claim 10, the combination of Miyagawa, Jarrett and Rujuter discloses the wireless device as claimed in claim 7. Rujuter further discloses the external interface module is suitable for sending and receiving periodic signals at a frequency lying

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between 100 and 500kHz (during reception of the data 3db cut-off frequency of the low-pass filter is set to 100 Hz) (**pg. 1, paragraph [0005]**).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the combination of Miyagawa, Jarrett and Rijuter to include the external interface module is suitable for sending and receiving periodic signals at a frequency lying between 100 and 500kHz. Motivation for this modification would have been to enhance the use of a cordless telephone so that there is good noise suppression and a short settling time.

Regarding claim 11, the combination of Miyagawa, Jarrett and Rijuter discloses the wireless device as claimed in claim 7. Miyagawa further discloses the interface circuit of the external interface module is controlled by the electronic central unit of the external interface module via a serial interface controller (according to figure 2 the transceiver 71 is connected in series with the controller) (**see figure 2**).

7. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagaw, **U.S. Patent 5,533,101**, in view of De Ruijter et al. (Ruijter), **U.S. Publication 10,502,521**, in further view of Jarrett, **U.S. Patent 6,950,674**, in further view of Silen et al. (Silen), **U.S. Publication 9,974,526**.

Regarding claim 12, the combination of Miyagawa, Jarrett and Rijuter discloses the wireless device as claimed in claim 7. The combination fails to discloses the central base and the external interface module are suitable for communicating according to a half duplex asynchronous protocol.

In a similar field of endeavor the pc is connected to network 1 and to the compiler via the internet 9 and WAP may be used, (the interface recognizes the request as a control request and transfers the request to the compiler, which may be programmed to provide several options in response to a control request (incoming message) and when the compiler receives the correct menu item the control code is embedded in an email or SMS message and transmitted to the external device) (see Silen, pg. 3, paragraph [0038] and pg. 2, paragraph [0034]).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify the combination of Miyagawa, Jarrett and Rijuter to include a central base also suitable for sending outgoing alphanumeric messages to at least one wireless peripheral device, by using said wireless protocol, and for receiving incoming alphanumeric messages from said wireless peripheral devices. Motivation for this modification would have been to enhance the use of the terminating set, by allowing the DTMF receiver and generator to be used in combination with a network compiler.

Regarding claim 13, the combination of Miyagawa, Jarrett, Silen and Rijuter discloses the wireless device as claimed in claim 7. Silen further discloses also comprising an external electronic device, distinct from the external interface module and communicating with the electronic central unit of said external module (the interface recognizes the request as a control request and transfers the request to the compiler, which may be programmed to provide several options in response to a control request (incoming message) and when the compiler receives the correct menu item the control

code is embedded in an email or SMS message and transmitted to the external device)  
**(pg. 3, paragraph [0038]).**

At the time of the invention it would have been obvious to one ordinary skill in the art to modify the combination of Miyagawa, Jarrett, Silen and Rijuter to include discloses also comprising an external electronic device, distinct from the external interface module and communicating with the electronic central unit of said external module. Motivation for this modification would have been to enhance the use of the terminating set, by allowing the DTMF receiver and generator to be used in combination with a network compiler.

Regarding claim 14, the combination of Miyagawa, Jarrett, Silen and Rijuter discloses the wireless device as claimed in 13. Miyagawa further discloses in which the external device is chosen from a sensor, an actuator, and a centralized command and control device suitable for being connected to a plurality of sensors and actuators (the connector contacts correspond to external contacts of the branch set) **(col. 6 lines 55-60).**

Regarding claim 15, the combination of Miyagawa, Jarrett, Silen and Rijuter discloses the wireless device as claimed in claim 7. Silen further discloses comprising a central base, and in which the electronic central unit of the external interface module is suitable for causing messages intended to be sent by the central base in the form of outgoing service messages to be generated on the supply line, by the interface circuit of said external interface module (the interface recognizes the request as a control request and transfers the request to the compiler, which may be programmed to provide several

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options in response to a control request (incoming message) and when the compiler receives the correct menu item the control code is embedded in an email or SMS message and transmitted to the external device) (see Silen, pg. 3, paragraph [0038] and pg. 2, paragraph [0034]).

At the time of the invention it would have been obvious to one ordinary skill in the art to modify the combination of Miyagawa, Jarrett, Silen and Rijuter to comprising a central base, and in which the electronic central unit of the external interface module is suitable for causing messages intended to be sent by the central base in the form of outgoing service messages to be generated on the supply line, by the interface circuit of said external interface module. Motivation for this modification would have been to enhance the use of the terminating set, by allowing the DTMF receiver and generator to be used in combination with a network compiler.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celeste L. Loftin whose telephone number is 571-272-2842. The examiner can normally be reached on Monday thru Friday 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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CL

  
JOY R. CONTEE  
PATENT EXAMINER